

ABSTRACT OF THE DISCLOSURE

An optical system has an expander lens and an objective lens. The following formula is satisfied: $W1_{CM} > W2_{CM}$, where $W1_{CM}$ is a coma aberration (λ_{rms}) of a converged light spot when an off-axial light flux of a wavelength λ (nm) emitted so as to converge at a distant position from the optical axis comes into the objective lens, and $W2_{CM}$ is a coma aberration (λ_{rms}) of a converged spot when an off-axial light flux of the wavelength λ (nm) emitted so as to converge at the distant position distant comes through the expander lens into the objective lens on a condition that the optical axis of the expander lens is arranged so as to conform with the optical axis of the objective lens.